THE CACOMITL CAT OF THE RIO GRANDE VALLEY.

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Professor Baird, on page 88 of his Mammals of North America, published in July, 1857, characterized the Cacomitl Cat under the name Felis yaguarundi, Desm., but in the synonymy of the species placed "Felis cacomitl, Berl. MSS.," and said: "A skull (No. 1426) of this species, in the collection of Dr. Berlandier, collected at Matamoras, with a full description of the animal by him, establishes a more northern range for this species than has hitherto been accorded. In its southern range it reaches as far as Paraguay. A full description of the skin and skull of this species will be found in the zoological report of the United States and Mexican Boundary Survey," where (p. 12) Baird quotes Berlandier's manuscript description. The name Felis cacomitli, as spelled by Berlandier, will date from the special report upon the Mammals of the Mexican Boundary, published in 1859, it being a nomen nudum as printed by Baird in 1857. The animal in question proves to be distinct from Felis yaguarundi, and is described below:

FELIS CACOMITLI Berlandier.

CACOMITL CAT.

1857. Felis cacomitl Baird, Mammals of North America, p. 88, synonymy (nomen nudum).

1859. Felis cacomitti Berlandier, in Baird, Report United States and Mexican Boundary Survey, II, Mammals, p. 12 (original description).

1883. Felis calomitti Elliot, Monograph of the Felidæ, p. 97, synonymy.

Characters.—Proportions as in other members of the Felis yaguarundi group. Larger than Azara's "yagüarundi" (= Felis yaguarundi

¹I have used the spelling of Azara, being uncertain as to the original reference. Tronessart's first reference is to Fischer's Zoognosia, but the name is not used in that work. Fitzinger's first binomial reference is "Felis yayonarondi. Geoffr. Catal. du Mus." [1803].

of authors); color lighter and grayer. Skull strongly constricted postorbitally, flattened superiorly. Mammæ, 3 pairs.

Color in summer (based on specimen No. 34355, U.S. N.M., Biological Survey collection; adult female, taken at Brownsville, Texas, June 14, 1892).—Seen at a distance, the animal appears of a nearly uniform smoke-gray color, without strong contrasts. On close inspection the under surfaces of body and tail are seen to be considerably paler than the upper, and certain light and dark areas are apparent. parts, including upper side of tail and outer surface of limbs, uniform pepper-and-salt gray; underfur and concealed bases of the coarse overhair whitish gray; overhair 10 to 20 mm. in length, pointed with black and ringed with white, buff, and black. parts paler, many of the hairs, especially of axillæ and hollows of thighs, being tipped with whitish. Under surfaces of fore and hind feet strongly tinged with bistre. Under side of tail whitish smokegray, the overhairs narrowly ringed with black. Head with areas of light buffy gray bordering the blackish evering, on chin and throat, and within and behind ear; a short, narrow line of blackish midway between eyes, and another between ears, and faintly brownish black edges to the ears; muzzle tinged with wood brown. Whiskers mostly

Color in winter (based on specimen No. $\frac{32677}{44600}$, U.S.N.M., Biological Survey collection; adult female, taken at Brownsville, Cameron County, Texas, February 23, 1892).—Darker, pelage longer, with a greater amount of black in vertebral area than laterally; under side of feet bistre, upper side more mixed with brownish black; otherwise similar to the summer pelage above described.

white, shading apically to hair brown; stiff hairs above orbits, 10 to 15 mm. in length and uniform hair brown. Claws light horn color.

Skull and teeth.—Skull compressed in front of orbits and flattened above; braincase narrow and strongly constricted postorbitally; nasal processes of frontals ending well in front of the plane of malar bone; nasal bones elongated laterally and strongly depressed; zygomata relatively broad posteriorly; audital bulle large and high, anterolaterally compressed; posterior narial fossa wide. The canines, upper carnassials, and middle superior premolars are about the size of the same teeth in specimen No. 10018, U.S.N.M., assumed to represent the Felis yaguarondi tolteca of Thomas; but the upper lateral incisor, first premolar, and true molar are larger teeth. A supernumerary first upper premolar is present, on the right side only, in female No. 35953, U.S.N.M., from Texas (see measurements).

Remarks.—Mr. Oldfield Thomas¹ separates a subspecies tolteca from the true Felis yaguarundi of Paraguay. I have identified with

¹ Annals and Magazine of Natural History, 7th ser., I, p. 41, January, 1898.

Thomas's Felis yaguarondi tolteca, the type of which came from Tetemales, State of Sinaloa, Mexico, specimen No. 10018, U.S.N.M., from Tehuantepec, Mexico. Although the skull of this specimen is longer by 11 mm, than the type, it agrees with it so closely in proportions that it must be regarded as probably conspecific. Besides the difference in the size of the upper true molar and first premolar, which are much smaller, the skull is higher and more convex, zygomata more massive, and audital bullar lower and more inflated anteriorly than in Felis cacomitli. The skull is also remarkable for the great postorbital breadth of the braincase and for the brevity of the nasal processes of the frontal bones, which end on a line vertically over the anterior extremities of the jugals. Felis cacomitli requires no color comparison with Felis yaquarondi tolteca. Mr. Thomas regarded the latter as probably the same as Baird's "Felis cacomitl, Berl. MSS.," in the synonymy of F. yaquarundi, but did not consider the name tenable.

External measurements.—Average of two adult females (described above): Length, 1060 mm.; tail vertebræ, 480; length of hind foot, 140; height of ear above crown, 40.

Cranial measurements.—I have used the same cranial measurements as Thomas, for convenience of comparison with Felis yaguarondii tolteca, those of his type following in parenthesis those of specimen No. 35645, U.S.N.M., an adult male of Felis cacomitti from Texas: Basilar length of Hensel, 95 (82); zygomatic breadth, 70 (64); least interorbital breadth, 20 (18); intertemporal breadth, 30 (33.5); breadth of braincase above auditory meatus, 46 (43); palate, length from henselion to posterior edge, excluding median notch, 40.7 (36); breadth between outer corners of carnassials, 39 (38.7); breadth of posterior narial fossa, 13.3 (14); front of canine to back of carnassial, 31 (28.7); length of upper carnassial, 13 (11.3); length of lower carnassial, 9 (9).

Average and extremes of four adult females from Texas and Matamoras, Mexico: Basilar length of Hensel, 87.4 (85.5–89); zygomatic breadth, 64.5 (64–66); least interorbital breadth, 18 (17–19); intertemporal breadth, 29.5 (28.5–30); breadth of braincase above auditory meatus, 44 (43–45); palate, length from henselion to posterior edge, excluding median notch, 36.4 (36–37); breadth between outer corners of carnassials, 38 (37–38.5); breadth of posterior narial fossa, 12.9 (12.7–13); front of canine to back of carnassial, 29.5 (28.5–30); length of upper carnassial, 12.5 (12.3–12.8); length of lower carnassial, 8.9 (8.8–9).

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Detailed cranial measurements of Felis yaguarondi tolteca and F. cacomitli.

Name.	Felis yaguarondi tolleca Thomas.		Felis cacomitti Berlandier.				
Sex, number, and locality.	Male, type of Felis yaquarendi tolteca (from Thomas).	Male (?) No. 10018, Tehuantepec, Mexico.	Male, No. 35645, Brownsville, Texas.	Female, No. 35953, Brownsville, Texas.	Female, No. 46441. Brownsville, Texas.	Female, No. 46441, Brownsville, Texas.	Female, type of Felis cacomitli, Mata- moras, Mexico, No. 1426.
Basilar length of Hensel Zygomatic breadth Least interorbital breadth Intertemporal breadth Breadth of braincase above auditory	82 64 18 33.5	93 70 22 35	95 70 20 30	88 64 18 29, 5	89 66 19 30	87 64 17 28, 5	85.5 64 18 30
meatus Palate, length from henselion to posterior edge, excluding median notch	43 36	47 38	46 40. 7	45 36, 7	44 37	43 36	44 36
Breadth between outer corners of carnas- sials Breath of posterior narial fossa Front of canine to back of carnassial Length of upper carnassial Length of lower carnassial.	11.3	40.3 14.3 30 12.3 9	39 13. 3 31 13 9	38 13 28,5 12,5 8,8	38.5 12.7 29.5 12.8 9	37.5 13 30 12.5 9	37 13 30 12, 3 8, 9